Senate



General Assembly

File No. 463

January Session, 2009

Substitute Senate Bill No. 1130

Senate, April 6, 2009

The Committee on Energy and Technology reported through SEN. FONFARA, J. of the 1st Dist., Chairperson of the Committee on the part of the Senate, that the substitute bill ought to pass.

AN ACT CONCERNING ENERGY AND THE STATE'S ECONOMY.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- Section 1. Section 16-243v of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
- 3 (a) For purposes of this section: (1) "Connecticut electric efficiency
- 4 partner program" means the coordinated effort among the Department
- 5 of Public Utility Control, the Connecticut Center for Advanced
- 6 <u>Technology</u>, the Renewable Energy Investment Fund, electric
- distribution companies, the Institute for Sustainable Energy, persons
- 8 and entities providing enhanced demand-side management
- 9 technologies, and electric consumers to conserve electricity, use
- 10 <u>electricity more efficiently</u> and reduce demand in Connecticut through
- 11 the purchase and deployment of energy efficient technologies and to
- 12 promote the development and use of Class I renewable energy sources,
- as defined in subdivision (26) of subsection (a) of section 16-1; (2)
- 14 "enhanced demand-side management technologies" means demand-

side management solutions, customer-side emergency dispatchable generation resources, customer-side renewable energy generation, load shifting technologies, [and] conservation and load management technologies that reduce electric distribution company customers' electric demand or natural gas or oil consumption, technologies that manage, optimize or improve the efficiency of electricity usage or the ability to procure energy more effectively relative to a customer's specific load characteristics or improve the efficiency or performance of the electric system, combined heat and power systems, solar thermal and geothermal systems, Class I renewable sources connected on the customer side of the meter, and high efficiency natural gas and oil boilers and furnaces; [and] (3) "Connecticut electric efficiency partner" means an electric distribution company customer who acquires an enhanced demand-side management technology or a person, Jother than including an electric distribution company, that provides enhanced demand-side management technologies distribution company customers; and (4) "Energy Innovation Council" means the council established pursuant to subsection (h) of this section.

- (b) [The] <u>Until June 1, 2009, the</u> Energy Conservation Management Board, in consultation with the Renewable Energy Investments Advisory Committee, shall evaluate and approve enhanced demand-side management technologies that can be deployed by Connecticut electric efficiency partners to reduce electric distribution company customers' electric demand. Such evaluation shall include an examination of the potential to reduce customers' demand, federally mandated congestion charges and other electric costs. On or before October 15, 2007, the Energy Conservation Management Board shall file such evaluation with the Department of Public Utility Control for the department to review and approve or to review, modify and approve on or before October 15, 2007.
- (c) Not later than October 15, 2007, the Energy Conservation Management Board shall file with the department, for the department to review and approve or to review, modify and approve, an analysis

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of the state's electric demand, peak electric demand and growth forecasts for electric demand and peak electric demand. Such analysis shall identify the principal drivers of electric demand and peak electric demand, associated electric charges tied to electric demand and peak electric demand growth, including, but not limited to, federally mandated congestion charges and other electric costs, and any other information the department deems appropriate. The analysis shall include, but not be limited to, an evaluation of the costs and benefits of the enhanced demand-side management technologies approved pursuant to subsection (b) of this section and establishing suggested funding levels for said individual technologies.

(d) Commencing April 1, 2008, and continuing until the effective date of this section, any person may apply to the department for certification and funding as a Connecticut electric efficiency partner. Such application shall include the technologies that the applicant shall purchase or provide and that have been approved pursuant to subsection (b) of this section. In evaluating the application, the department shall (1) consider the applicant's potential to reduce customers' electric demand, including peak electric demand, and associated electric charges tied to electric demand and peak electric demand growth, (2) determine the portion of the total cost of each project that shall be paid for by the customer participating in this program and the portion of the total cost of each project that shall be paid for by all electric ratepayers and collected pursuant to subsection (h) of this section. In making such determination, the department shall ensure that all ratepayer investments maintain a minimum two-to-one payback ratio, and (3) specify that participating Connecticut electric efficiency partners shall maintain the technology for a period sufficient to achieve such investment payback ratio. The annual ratepayer contribution for projects approved pursuant to this section shall not exceed sixty million dollars. Not less than seventy-five per cent of such annual ratepayer investment shall be used for the technologies themselves. No person shall receive electric ratepayer funding pursuant to this subsection if such person has received or is receiving funding from the Energy Conservation and Load Management Funds

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for the projects included in said person's application. No person shall receive electric ratepayer funding without receiving a certificate of public convenience and necessity as a Connecticut electric efficiency partner by the department. The department may grant an applicant a certificate of public convenience if it possesses and demonstrates adequate financial resources, managerial ability and technical competency. The department may conduct additional requests for proposals from time to time as it deems appropriate. The department shall specify the manner in which a Connecticut electric efficiency partner shall address measures of effectiveness and shall include performance milestones.

(e) [Beginning February 1, 2010, a certified Connecticut electric efficiency partner may only receive funding if selected in a request for proposal developed, issued and evaluated by the department. In evaluating a proposal, the department shall take into consideration the potential to reduce customers' electric demand including peak electric demand, and associated electric charges tied to electric demand and peak electric demand growth, including, but not limited to, federally mandated congestion charges and other electric costs, and shall utilize a cost benefit test established pursuant to subsection (c) of this section to rank responses for selection. The department shall determine the portion of the total cost of each project that shall be paid by the customer participating in this program and the portion of the total cost of each project that shall be paid by all electric ratepayers and collected pursuant to the provisions of this subsection. In making such determination, the department shall (1) ensure that all ratepayer investments maintain a minimum two-to-one payback ratio, and (2) specify that participating Connecticut electric efficiency partners shall maintain the technology for a period sufficient to achieve such investment payback ratio. The annual ratepayer contribution shall not exceed sixty million dollars. Not less than seventy-five per cent of such annual ratepayer investment shall be used for the technologies themselves. No Connecticut electric efficiency partner shall receive funding pursuant to this subsection if such partner has received or is receiving funding from the Energy Conservation and

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119 Management Funds for such technology. The department may conduct 120 additional requests for proposals from time to time as it deems 121 appropriate. The department shall specify the manner in which a 122 Connecticut electric efficiency partner shall address measures of 123 effectiveness and shall include performance milestones.] On and after 124 the effective date of this section, any person may apply to the 125 department for certification as a Connecticut electric efficiency partner. 126 Such application shall include the technologies that the applicant shall 127 provide pursuant to subsection (f) of this section. The department shall 128 act on any application within thirty days of receipt and may grant an 129 applicant a certificate of public convenience if it possesses and 130 demonstrates adequate financial resources, managerial ability and 131 technical competency. The department may, with the consent of the applicant, extend the time for decision on the application by an 132 133 additional thirty days if necessary to obtain additional information 134 regarding the applicant or the technologies. The department may conduct additional requests for proposals from time to time. No 135 136 Connecticut electric efficiency partner shall receive electric ratepayer 137 funding without receiving a certificate of public convenience and 138 necessity as a Connecticut electric efficiency partner by the 139 department.

(f) [The] <u>Until the effective date of this section, the</u> department may retain the services of a third party entity with expertise in areas such as demand-side management solutions, customer-side renewable energy generation, customer-side distributed generation resources, customer-side emergency dispatchable generation resources, load shifting technologies and conservation and load management investments to assist in the development and operation of the Connecticut electric efficiency partner program. The costs for obtaining third party services pursuant to this subsection shall be recoverable through the systems benefits charge.

(g) [The] <u>Until the effective date of this section, the</u> department shall develop a long-term low-interest loan program to assist certified Connecticut electric efficiency partners in financing the customer

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portion of the capital costs of approved enhanced demand-side management technologies. The department may establish such financing mechanism by the use of one or more of the following strategies: (1) Modifying the existing long-term customer-side distributed generation financing mechanism established pursuant to section 16-243j, (2) negotiating and entering into an agreement with the Connecticut Development Authority to establish a credit facility or to utilize grants, loans or loan guarantees for the purposes of this section upon such terms and conditions as the authority may prescribe including provisions regarding the rights and remedies available to the authority in case of default, or (3) selecting by competitive bid one or more entities that can provide such long-term financing.

(h) The department shall establish an Energy Innovation Council, which shall have the following members: (1) The executive director of the Connecticut Center for Advanced Technology; (2) the director of the Renewable Energy Investment Fund; (3) the chairman of the Institute for Sustainable Energy; and (4) a commissioner of the Public Utilities Control Authority or staff designee of the department. The council's objective shall be to expedite the commercialization and impact of enhanced energy management technologies. The council shall provide oversight to the Connecticut electric efficiency partner program pursuant to the provisions of this section. The council shall confer at least monthly and provide written reports of its meetings and actions. Each member may draw upon expertise from within the member's entity to support the council's efforts. Each electric distribution company shall appoint a representative to serve in an advisory capacity to the council and facilitate council communication with the company.

(i) On and after the effective date of this section, the Energy Innovation Council shall evaluate and approve within ninety days of submittal new applications from Connecticut electric efficiency partners for projects and grants for enhanced demand-side management technologies as part of the Connecticut electric efficiency partner program, provided any such application is consistent with this

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section and demonstrates for the proposed project that there is either (1) an electric system benefit-to-cost ratio of at least one and one-half to one for the project; or (2) an electric system benefit-to-cost ratio of at least one to one and the project integrates Class I renewable energy sources or produces natural gas or oil savings. All Connecticut electric efficiency partner applications for projects seeking a grant shall indicate that the participating customer will pay for at least fifty per cent of the installed costs, provided such customer share may be offset with applicable tax credit, energy value or other savings. The council shall award grants on an individual application basis. The council shall also specify that participating Connecticut electric efficiency partners shall maintain the technology for a period sufficient to achieve the expected benefits. To assist a Connecticut electric efficiency partner in developing its application for submittal to the council and before submitting such application, an applicant may seek written verification from the council that its proposed project is sufficiently and reasonably defined, which the council shall determine within thirty days, and, after such verification and with the affected customer or customers' written permission, the Connecticut electric efficiency partner may request billing and usage data on behalf of such customer or customers from an electric distribution company, which shall provide the requested information within thirty days from receipt of the request.

(j) Connecticut electric efficiency partner projects approved pursuant to subsection (i) of this section may receive a one-time grant, not to exceed fifty per cent of the total installed cost of the project. The council shall determine the size of grants on an individual application basis and shall adjust the size of the grant based on (1) economics of the specific project; (2) whether the project preserves or creates jobs in Connecticut; (3) environmental benefits realized as a result of the project; (4) the project's ancillary electric market or system benefits; and (5) the degree of technology integration and innovation. Such grants will be funded directly through the Connecticut electric efficiency partner program. On and after the effective date of this section, the annual ratepayer contribution for projects approved pursuant to this section shall not exceed sixty million dollars, provided

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any one technology cannot use more than one-third of the annual funding of grants for the electric efficiency partner program. An electric distribution company shall recover its costs and investment in its Connecticut electric efficiency partner project, as described in its application, through the systems benefits charge, provided, if actual or projected costs of all projects exceed sixty million dollars in one year, the electric distribution company may defer such excess, with a return, for future recovery, and further provided the council shall adjust future grants and projects to assure that any such excess beyond sixty million dollars of annual costs are minimized. The annual ratepayer contribution recovered through the systems benefits charge pursuant to this section for electric distribution company projects approved pursuant to subsections (i) and (k) of this section shall not exceed thirty million dollars. Notwithstanding any provision of the general statutes, an electric distribution company may develop, purchase, own and operate renewable energy source generation pursuant to this section.

(k) For each project or program supported by ratepayer contribution, the council shall require the applicable Connecticut electric efficiency partner to submit data sufficient to enable the department and an electric distribution company to determine annual revenue requirements on a forecasted and actual basis and to enable the council to monitor the efficacy and cost-effectiveness of such project or program at least annually, commencing in the year after the project or program has become operational. In conducting such monitoring, the council may work in conjunction with the Energy Conservation Management Board or may use a third-party consultant, provided the costs of monitoring shall be included as recoverable costs pursuant to subsection (1) of this section. The council shall review the results of the monitoring and shall issue a report, in accordance with the provisions of section 11-4a, to the joint standing committee of the General Assembly having cognizance of matters relating to energy. If the council determines that a project or program has not provided or will not provide the benefits that formed the basis for the grant or other ratepayer contribution, the council may suspend further grants for the project or program, provided any grants or costs awarded shall

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[(h)] (l) The department [shall] and the council may provide for the payment of [electric ratepayers'] a participating electric customer's portion of the costs of deploying enhanced demand-side management technologies by implementing a contractual financing agreement with the Connecticut Development Authority or a private financing entity selected through an appropriate open competitive selection process, through loans available from the Renewable Energy Investment Fund or through a financing agreement with an electric distribution company. The department and council shall provide for the payment of electric ratepayers' portion of the costs of deploying enhanced demand-side management technologies by allowing an electric distribution company to recover any remaining costs of participation through the systems benefits charge. The electric distribution companies may earn a return on investment in any enhanced demandside technologies equal to that allowed for a generation project proposed in whole or in part by an electric distribution company approved by the department pursuant to section 16-243u. Such costs and return may be recovered over time by establishing a regulatory asset, with electric distribution company recovery with a return through the systems benefits charge over an amortization period to be established by the department based upon the expected useful life of the projects and programs. Section 16-43 shall not apply to any loan or financing arrangement made by an electric distribution company pursuant to this section. No contractual financing agreements entered into with the Connecticut Development Authority shall exceed ten million dollars. Any electric ratepayer costs resulting from such financing agreement shall be recovered from all electric ratepayers through the systems benefits charge.

[(i)] (m) On or before [February 15, 2009, and annually thereafter, the department] July 1, 2010, the council shall report to the joint standing committee of the General Assembly having cognizance of matters relating to energy regarding the effectiveness of the Connecticut electric efficiency partner program established pursuant to

this section. Said report shall include, but not be limited to, an accounting of all benefits and costs to ratepayers, a description of the approved technologies, the payback ratio of all investments, the number of programs deployed and a list of proposed projects compared to approved projects and reasons for not being approved.

[(j)] (n) On or [before] after April 1, [2011] 2012, the Department of Public Utility Control shall initiate a proceeding to review the effectiveness of the program and perform a ratepayer cost-benefit analysis. Based upon the department's findings in the proceeding, [the department may modify or discontinue] the council may recommend to the joint standing committee of the General Assembly having cognizance of matters relating to energy that the partnership program established pursuant to this section be modified or discontinued.

(o) On or before August 1, 2009, the electric distribution companies and the council shall determine the scope of an energy intensity study of customers for which energy is a material part of their cost structure and shall complete such study by September 30, 2009. The electric distribution companies shall contact customers identified in such study that appear to have energy characteristics that may benefit from participation in the electric efficiency partner program and seek their permission to be identified to entities that may offer solutions to such customers through a solicitation process administered by the council. The council shall include information on this process in its annual reports to the General Assembly.

(p) (1) Electric distribution companies may own and operate Class I renewable generation facilities within the state. An electric distribution company shall work with local equipment manufacturers and craft workers in developing and constructing such facilities, provided (A) such facilities are connected to its distribution system; (B) the equipment for such facilities are manufactured or assembled by companies within the state to the extent practicable; (C) the facilities are installed and maintained by workers employed within the state; and (D) the council approves the technologies used in the project. The

cumulative ownership of Class I renewable energy sources by electric distribution companies pursuant to this subsection shall not exceed thirty megawatts of capacity by December 31, 2010, sixty-five megawatts by December 31, 2011, and one hundred megawatts by December 31, 2012. The council shall review the program by February 15, 2012, and recommend to the joint standing committee of the General Assembly having cognizance of matters relating to energy whether to extend and expand this program beyond 2012.

- (2) For facilities owned and operated by an electric distribution company pursuant to this subsection, such company shall recover its costs based on a reconciling formula that provides for full recovery of any incurred costs, including a return on investment established as described in subsection (l) of this section, based on cost-of-service principles pursuant to section 16-19e, provided the department shall approve such formula, after a hearing held in a proceeding or proceedings separate from other distribution rate proceedings. Such projects shall be eligible for any state or federal incentives, grants or credits, including, but not limited to, those available under programs administered by the Renewable Energy Investments Board. Any revenue requirements resulting from this program incurred before 2012 shall be recovered through the funding established in subsection (i) of this section.
- (3) The Energy Innovation Council, in conjunction with the participating electric distribution companies and certified Connecticut electric efficiency partners, shall issue a report, in accordance with the provisions of section 11-4a, to the joint standing committees of the General Assembly having cognizance of matters relating to energy and technology, environment and commerce no later than January fifteenth of 2010, 2011 and 2012. This report shall describe (A) the status of the Connecticut electric efficiency partner program, including the levels and types of participation; (B) the amount of authorized investment and its cost; (C) the actual and expected future benefits created by the program, including contributions to Connecticut jobs and commerce; (D) the improvement to the commercialization of Class I renewable

energy sources and their integration with the state's power systems and energy markets; and (E) opportunities to improve the effectiveness of the program. The 2012 report shall also include a summary of all three years and recommendations for further use of the program. The council shall retain an independent consulting firm from a list of firms developed by the department, in consultation with the Office of Consumer Counsel, to audit the council's records and the program operations and project results, and the report from such firm shall be included in the council's annual report to the General Assembly.

- (4) Not later than September 1, 2009, the council and electric distribution companies shall, working together, identify no less than two studies to determine optimal locations and characteristics for installing Class I renewable energy sources under this program. No later than September 1, 2009, the council shall provide electric distribution companies with an assessment of key issues pertinent to the commercialization of fuel cells and their integration with the state's electric systems and energy markets, including lessons learned from previously proposed or completed projects. The electric distribution companies shall work in conjunction with staff from the council or its members' staffs to issue, no later than December 31, 2009, the findings of the two studies, with consideration of the fuel cell assessment, and such findings shall provide guidance to the investments made under the purview of this program.
- Sec. 2. Subsection (a) of section 16-50k of the general statutes is repealed and the following is substituted in lieu thereof (*Effective July* 383 1, 2009):
 - (a) Except as provided in subsection (b) of section 16-50z, no person shall exercise any right of eminent domain in contemplation of, commence the preparation of the site for, commence the construction or supplying of a facility, or commence any modification of a facility, that may, as determined by the council, have a substantial adverse environmental effect in the state without having first obtained a certificate of environmental compatibility and public need, hereinafter

referred to as a "certificate", issued with respect to such facility or modification by the council. Certificates shall not be required for (1) fuel cells built within the state with a generating capacity of two hundred fifty kilowatts or less, or (2) fuel cells built out of state with a generating capacity of ten kilowatts or less. Any facility with respect to which a certificate is required shall thereafter be built, maintained and operated in conformity with such certificate and any terms, limitations or conditions contained therein. Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling (A) the construction of a facility solely for the purpose of generating electricity, other than an electric generating facility that uses nuclear materials or coal as fuel, at a site where an electric generating facility operated prior to July 1, 2004, (B) the construction or location of any fuel cell, unless the council finds a substantial adverse environmental effect, or of any customer-side distributed resources project or facility or grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as such project meets air and water quality standards of the Department of Environmental Protection, [and] (C) the siting of temporary generation solicited by the Department of Public Utility Control pursuant to section 16-19ss, and (D) projects undertaken pursuant to section 16-243v, as amended by this act.

This act shall take effect as follows and shall amend the following		
sections:		
Section 1	from passage	16-243v
Sec. 2	July 1, 2009	16-50k(a)

Statement of Legislative Commissioners:

In section 1, names of entities were corrected and provisions were rephrased for clarity and statutory consistency.

ET Joint Favorable Subst.-LCO

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The following fiscal impact statement and bill analysis are prepared for the benefit of members of the General Assembly, solely for the purpose of information, summarization, and explanation, and do not represent the intent of the General Assembly or either House thereof for any purpose:

OFA Fiscal Note

State Impact: None

Municipal Impact: None

Explanation

This bill requires the Department of Public Utility Control (DPUC) to create the Energy Innovation Council. The Council will review applications for funding as a member of the Connecticut electric efficiency partner program. This bill does not provide funding for the Council, therefore it is expected the DPUC will absorb any increased administrative workload. There is no anticipated fiscal impact associated with this bill.

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State Impact: None

Municipal Impact: None

OLR Bill Analysis sSB 1130

AN ACT CONCERNING ENERGY AND THE STATE'S ECONOMY.

SUMMARY:

This bill broadens the scope of and makes many other changes to the Connecticut electric efficiency partner program. This program provides financial incentives, funded by electric company ratepayers, for various demand-side management (energy efficiency and on-site generation) technologies. Among other things, the bill broadens the entities involved in administering the program and expands the types of technologies that can be funded. It also allows electric companies to participate as partners in the program. Under current law only technology providers and electric company customers can do so.

The bill changes how the program is administered. Under current law, the Department of Public Utility Control (DPUC) simultaneously reviews an entity's application to be certified as a partner and its application for funding under the program. The bill splits these two reviews between the DPUC and the Energy Innovation Council that it creates. It generally requires DPUC to determine whether an applicant qualifies as a partner within 30 days. It requires the council to approve funding and how the funding is spent. It requires the council to monitor spending under the program and report on it to the Energy and Technology Committee.

The bill changes how projects are funded. Under current law, a participating customer pays half or more of the cost of an approved project and ratepayers pay the remaining costs. The bill allows ratepayer funding under the partner program even if the customer or other partner has received or is receiving funding from the Energy Conservation and Load Management Funds for the project. The bill

eliminates a requirement that DPUC develop a program to provide long-term, low-interest loans to finance the customer's share of the costs but provides alternative financing mechanisms. The bill appears to retain a cap of \$60 million that electric companies can recover from ratepayers in any one year for this program but makes provisions for when the companies income is more than \$60 million in cost in a year. The bill allows the electric company to earn a return on its costs and investments through the systems benefits charge (SBC), a charge on electric bills that is used to pay various public policy costs. The bill establishes a \$30 million cap on ratepayer funding for electric company projects using this charge.

The bill also broadens the program to allow electric companies to develop, purchase, own, and operate certain types of renewable energy source generation. The companies are allowed to earn a rate of return on these investments. Under the bill, an electric company must recover the costs it incurs before 2012 for class I generation projects (e.g., solar or fuel cell projects) from the funding provided for partners program as described above. The bill has a separate cost-recovery mechanism for other facilities the company owns and operates. It appears that the \$60 million cap includes the costs associated with the company's renewable generation.

The bill requires electric companies and the council to (1) study the energy intensity of certain customers and (2) determine the best locations and characteristics for installing Class I renewable energy sources under the program.

The bill exempts projects developed under its provisions from requiring Siting Council approval.

EFFECTIVE DATE: July 1, 2009 for the Siting Council provision; upon passage for the remaining provisions.

SCOPE OF THE PROGRAM

Under current law, the purpose of the partner program is to conserve electricity and reduce demand in Connecticut through the

purchase and deployment of energy efficient technologies. The bill expands the purpose to include increasing the efficiency of electricity use and promoting the development and use of Class I renewable energy sources.

Under current law, the program involves DPUC, persons and entities providing enhanced demand-side management technologies, and electric consumers. (The technologies include both efficiency measures and certain types of on-site generation.) The bill additionally involves the Connecticut Center for Advanced Technologies (CCAT), the Clean Energy Fund, electric companies, and the Institute of Sustainable Energy at Eastern Connecticut State University.

The bill expands the range of technologies that can be developed under the program. Under current law, enhanced demand-side management technologies are those that (1) reduce electricity consumption; (2) change when electricity is consumed (which can lower costs); or (3) use certain technologies to generate electricity onsite, as well as high efficiency natural gas and oil boilers and furnaces. The bill expands the range of enhanced demand-side technologies to include:

- 1. technologies that reduce natural gas or oil consumption;
- technologies that manage, optimize, or improve the efficiency of electricity use or the ability to procure energy more effectively relative to a customer's specific load characteristics;
- 3. technologies that improve the efficiency or performance of the electric system;
- 4. combined heat and power (cogeneration) systems;
- 5. solar thermal and geothermal systems; and
- 6. other Class I renewable sources located on the customer's side of the electric meter.

Under current law, the "partners" who can participate in the program are electric company customers who acquire enhanced demand-side management technologies and a person that provides these technologies to the customer. The bill expands that latter group to include electric companies.

The bill repeals a provision that allows DPUC to retain a consultant with expertise in relevant areas to help develop and operate the program. Under current law, the consultant's costs are recoverable through the SBC.

ENERGY INNOVATION COUNCIL

The bill requires DPUC to establish an Energy Innovation Council to expedite the commercialization and impact of enhanced energy management technologies. Under the bill, the council consists of (1) CCAT's executive director, (2) the director of the Clean Energy Fund, (3) the chairman of the Institute for Sustainable Energy, and (4) a DPUC commissioner or staff designee. Under the bill, the council must oversee the partner program. It must confer at least monthly and provide written reports of its meetings and actions. Each member may draw upon expertise from within its entity to support the council's efforts. Each electric company must appoint a representative to advise the council and facilitate its communications with the company.

CERTIFICATION OF PARTNERS

By law, entities that seek to participate in the program must be certified as partners by DPUC. The certificate application must include the technologies that the applicant will purchase or provide that have been approved by DPUC. DPUC may grant a certificate if the applicant possesses and demonstrates adequate financial resources, managerial ability, and technical competency.

The bill requires DPUC to act on any application within 30 days of receiving it. It allows DPUC, with the applicant's consent, to extend this deadline by 30 days if more time is needed to obtain additional information on the applicant or the technologies it seeks to have

funded.

FUNDING TECHNOLOGIES AND PROJECTS

The bill transfers the responsibility for approving funding under the program from DPUC to the council on the date the bill passes. Under the bill, the council must evaluate and approve, within 90 days of submittal, new applications from partners for projects and grants for enhanced demand-side management technologies as part of the program. The bill does not define "project" but it appears to mean the installation of a technology in a particular setting.

To help partners develop their applications, the bill allows an applicant to seek written verification from the council that its proposed project is sufficiently and reasonably defined. The council must make this determination within 30 days. After this verification and with the written permission of the affected customer or customers, the partner may request billing and usage data on the customer's behalf from an electric company, which must provide the requested information within 30 days from receipt of the request.

Under the bill, all applications for projects seeking grants must indicate that the participating customer will pay for at least 50% of the installed costs. However, the customer's share may be offset with applicable tax credit, energy value, or other savings (see COMMENT).

The bill repeals provisions that require DPUC, in evaluating applications, to (1) consider the applicant's potential to reduce customers' electric demand, including peak electric demand, and associated electric charges tied to electric demand and peak electric demand growth and (2) determine the portion of the total cost of each project that will be paid for by the participating customer and the portion that will be paid for by all electric ratepayers.

The bill requires the council to award grants on an individual application basis. It entitles approved projects to a one-time grant, not to exceed 50% of the project's total installed cost. The council must adjust the size of the grant based on (1) the project's economics, (2)

whether it preserves or creates jobs in Connecticut, (3) the environmental benefits the project creates, (4) the project's ancillary electric market or system benefits, and (5) the degree of technology integration and innovation. The grants must be funded directly through the program.

Under current law, DPUC can approve technologies only if the ratepayer investments in them have at least a two-to-one payback ratio, i.e., the savings to ratepayers as a whole are at least twice as much as the ratepayer contributions toward the technology. The bill instead requires the applicant to demonstrate that a proposed project will have (1) an electric system benefit/cost ratio of at least 1.5 to one for the project, or (2) an electric system benefit/cost ratio of at least one-to-one if the project integrates Class I renewable energy sources or produces natural gas or oil savings. It appears that the bill is using payback ratio and benefit/cost ratio as synonyms.

The bill repeals technology approval provisions scheduled to take effect on February 1, 2010. These provisions specify that a certified partner may receive funding only if selected in a request for proposal developed, issued, and evaluated by DPUC. Under current law, DPUC must use a cost benefit test to rank responses for selection. The law's provisions also broaden the factors DPUC must consider in deciding whether to approve an application.

LONG-TERM FINANCING

The bill repeals a requirement that DPUC develop a long-term lowinterest loan program to help certified partners finance the customer portion of the capital costs of approved technologies using one of three strategies.

Under current law, DPUC must provide for the payment of ratepayers' portion of the costs of deploying enhanced demand-side management technologies by entering into a financing agreement with the Connecticut Development Authority (CDA) or a private financing entity selected through an appropriate open competitive selection

process.

The bill instead allows DPUC and the council to provide for the payment of a participating customer's portion of the costs of the technologies through these mechanisms or by (1) loans from the Clean Energy Fund or (2) a financing agreement with an electric company.

Under the bill, DPUC and the council must provide for the payment of the ratepayer's portion of the costs of these technologies by allowing an electric company to recover any remaining costs of participation through the SBC. These costs and return may be recovered over time by establishing a regulatory asset, with the electric company recovering a return through the SBC. (A regulatory asset is essentially an IOU held by a utility that entitles it to future recovery of DPUC-approved costs.) DPUC must set the period over which the company will recover its costs and earn a return based on the expected useful life of the projects and programs. The rate of return may equal that approved by DPUC under a law that allowed the electric companies to build power plants that operate at times of peak demand. The bill exempts these loans and financing arrangements from a DPUC review that takes place when a utility disposes of its assets or merges with another company.

By law, financing agreements entered into with CDA may not exceed \$10 million dollars. Any ratepayer costs resulting from such a financing agreement must be recovered from all ratepayers through the SBC.

RESTRICTIONS ON RATEPAYER CONTRIBUTIONS

Under current law, the annual ratepayer contribution for the partner program may not exceed \$60 million dollars. It appears that the bill retains the cap. The bill provides that if actual or projected costs of all projects exceed \$60 million in one year, the electric company may defer the excess, with a return, for future recovery (regulatory assets). The bill provides that in such circumstances, the council must adjust future grants and projects to assure that any such excess beyond \$60 million

of annual costs is minimized. It is not clear what happens if the company does not defer the excess.

The bill provides that no more than one-third of the total funding go to one technology. It also limits to \$30 million per year ratepayer funding for approved electric company projects whose costs are recovered through the SBC.

The bill eliminates provisions of current law that (1) require that at least 75% of the annual ratepayer investment be used for the technologies themselves and (2) bar a partner from receiving funding under the program if it has received or is receiving funding from the Energy Conservation and Load Management Funds for the same technology.

PROGRAM MONITORING

Under the bill, for each project or program supported by ratepayer contribution, the council must require the affected partner to submit enough data to allow (1) DPUC and an electric company to determine annual revenue requirements on a forecasted and actual basis and (2) the council to monitor the efficacy and cost-effectiveness of the project or program. The council's monitoring must occur at least annually, starting in the year after the project or program begins operating. The council may work with the Energy Conservation Management Board or use a third-party consultant in conducting the monitoring. The costs of monitoring must be recoverable costs through the SBC.

The council must review the results of the monitoring and issue a report to the Energy and Technology and Commerce committees. If the council determines that a project or program has not provided or will not provide the benefits that formed the basis for the grant or other ratepayer contribution, the council may suspend further grants for the project or program. But any grants or costs awarded must continue to be recovered by the electric company.

OTHER PROGRAM PROVISIONS

Under current law, by February 15 annually, DPUC must report to

the Energy and Technology Committee on the program's effectiveness. The bill instead requires the council to issue a single report by July 1, 2010. By law, the report must include (1) an accounting of all benefits and costs to ratepayers, (2) a description of the approved technologies, (3) the payback ratio of all investments, (4) the number of programs deployed, and (5) a list of proposed projects compared to approved projects and reasons for them not being approved.

Under the current law, by April 1, 2011, DPUC must initiate a proceeding to review the program's effectiveness and perform a ratepayer cost-benefit analysis. The bill instead requires DPUC to do this no earlier than April 1, 2012. Under current law, based on its findings in the proceeding, DPUC may modify or discontinue the program. The bill instead allows the council to recommend to the Energy and Technology Committee that the program be modified or discontinued.

ELECTRIC COMPANY OWNERSHIP OF RENEWABLE GENERATION RESOURCES

Amount of Generation Permitted

Current law generally bars electric companies from owning power plants or other generation resources. The bill allows electric companies to develop, purchase, own, and operate certain types of renewable energy source generation. It specifically allows them to own and operate class I facilities in the state. The companies must work with local equipment manufacturers and craft workers in developing and constructing such facilities, so long as (1) the facilities are connected to the electric company's distribution system, (2) the equipment for the facilities are manufactured or assembled by companies in the state to the extent practicable, (3) the facilities are installed and maintained by workers employed in the state, and (4) the council approves the technologies used in the project.

The cumulative ownership of Class I renewable energy resources by electric companies may not exceed 30 megawatts (MW) of capacity by December 31, 2010, 65 MW by December 31, 2011, and 100 MW by

December 31, 2012. (A MW is the amount of power used by 750 to 1,000 homes.) The council must review the program, by February 15, 2012, and recommend to the Energy and Technology Committee whether to extend and expand it beyond 2012.

The bill appears to allow electric companies to develop, purchase, own and operate other classes of renewable energy source generation, so long as they are located on the customer's side of the meter (see § 1(j)).

Electric Company Cost Recovery

Under the bill, an electric company must recover the costs it incurs before 2012 for class I projects from the funding provided for the partners program as described above, using the SBC.

The bill establishes a separate cost-recovery mechanism for other generation facilities owned and operated by an electric company. For these facilities, the company must recover its costs based on a formula. Before approving the formula, DPUC must hold a hearing, which must be separate from hearings on the company's distribution rates.

The formula must provide for full recovery of any incurred costs, including a return on investment based on traditional utility cost-of-service principles. The rate of return may equal that approved by DPUC under a law that allowed the electric companies to build power plants that operate at times of peak demand.

The projects are eligible for any state or federal incentives, grants, or credits, including those available under programs administered by the Clean Energy Fund's board.

REPORT

The bill requires the council, in conjunction with the participating electric companies and certified electric efficiency partners, to issue a report to the Energy and Technology, Environment, and Commerce committees by January 15 in 2010, 2011, and 2012. The report must describe:

1. the status of the program, including the levels and types of participation;

- 2. the amount of authorized investment and its cost;
- 3. the actual and expected future benefits created by the program, including contributions to Connecticut jobs and commerce;
- 4. the improvement to the commercialization of Class I renewable energy sources and their integration with the state's power systems and energy markets; and
- 5. opportunities to improve the effectiveness of the program. The 2012 report must also include a summary of all three years and recommendations for further use of the program.

The council must retain an independent consulting firm from a list of firms developed by DPUC, in consultation with the Office of Consumer Counsel, to audit the council's records and the program operations and project results. The firm's report must be included in the council's annual report to the legislature.

STUDY OF BEST LOCATIONS FOR RENEWABLE RESOURCES

The bill requires the council and electric companies to jointly identify, by September 1, 2009, at least two studies to determine the best locations and characteristics for installing Class I renewable energy sources under the program. Also by September 1, 2009, the council must provide the electric companies with an assessment of key issues pertinent to the commercialization of fuel cells and their integration with the state's electric systems and energy markets, including lessons learned from previously proposed or completed projects.

The electric companies must work with the council's staff (although the bill does not provide the council staff) or the council members' staff to issue, by December 31, 2009, the findings of the two studies, with consideration of the fuel cell assessment. The findings must provide

guidance to the investments made under the program.

ENERGY INTENSITY STUDY

The bill requires the electric companies and the council to determine, by August 1, 2009, the scope of an energy intensity study of customers for whom energy is a material part of their costs. The companies and council must complete the study by September 30, 2009. The companies must contact customers identified in the study that appear to have energy characteristics who may benefit from participation in the partners program. The companies must seek their permission to be identified to entities that may offer solutions to them through a solicitation process administered by the council. The council must include information on this process in its annual reports to the legislature. (It is unclear to which reports this provision is referring.)

BACKGROUND

Related Bill

sSB 1129, reported favorably by the Commerce Committee, is identical to this bill.

COMMENT

Unclear Project Financing Provision

The bill is unclear how the technology's vendor would recover its full costs under certain circumstances. The bill caps the ratepayer subsidy for approved projects under the program at 50% of installed costs. It requires the customer to pay at least 50% of the installed cost, but allows the customer's share to be offset with applicable tax credit, energy value or other customer savings. It is unclear how these offsets would help pay the installed cost. For example, if the installed cost of a technology was \$1 million, the maximum grant would be \$500,000. The customer's share would be at least \$500,000. It is unclear how the vendor would recover its costs if tax credits, energy value, or other savings were counted towards the customer's share, since there is no requirement in the bill that the customer transfer them to the vendor or the electric company.

COMMITTEE ACTION

Energy and Technology Committee

Joint Favorable

Yea 21 Nay 0 (03/19/2009)